

What is claimed is:

1. A speaker comprising:

a pole piece having a pole engaged with a bobbin behind a diaphragm;

a through hole passing through the pole in an axial direction thereof; and

a thin film piezoelectric element provided over an external opening of the through hole such that the element detects vibrations of the diaphragm by a change in pressure within the through hole.

2. The speaker according to Claim 1, wherein the through hole has an external opening which widens with it goes outward.

3. The speaker according to Claim 1, wherein the thin film piezoelectric element has one or more holes passing therethrough.

4. The speaker according to Claim 1, wherein the thin film piezoelectric element constructed by two thin film piezoelectric elements whose direction representative of high sensitivity intersect each other.

5. The speaker according to Claim 1, wherein the thin film piezoelectric element is formed of polyvinylidene fluoride.